

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.

# United States Department of Agriculture,

BUREAU OF ANIMAL INDUSTRY—Circular No. 44.

DAIRY DIVISION—No. 55.

## OFFICIALS, ASSOCIATIONS, AND EDUCATIONAL INSTITUTIONS CON- NECTED WITH THE DAIRY INTERESTS OF THE UNITED STATES FOR THE YEAR 1904.

WASHINGTON, D. C., *March 11, 1904.*

The accompanying lists will answer many inquiries made of this Department and also show the extent to which the dairy interests of the United States are organized. The lists contain the addresses of all the principal officials connected with this industry and exhibit the facilities offered in the several States for technical dairy instruction.

Approved:

JAMES WILSON,

*Secretary of Agriculture.*

HENRY E. ALVORD,  
*Chief of Dairy Division.*

### CONTENTS.

	Page.
United States Department of Agriculture .....	1
State dairy officials .....	2
Dairy associations .....	3
Dairy instruction .....	6
Purebred dairy cattle, associations, etc .....	11
International Dairy Federation and Congress .....	12

### UNITED STATES DEPARTMENT OF AGRICULTURE, 1904.

Secretary, JAMES WILSON.

*Dairy Inspectors.*

Assistant Secretary, J. H. BRIGHAM.

W. D. COLLYER, Illinois.

Bureau of Animal Industry:

JAMES HEWES, Maryland.

Chief, D. E. SALMON.

M. W. LANG, Ohio.

Assistant Chief, A. D. MELVIN.

W. D. MCARTHUR, California.

E. A. McDONALD, Washington.

WM. E. SMITH, New Jersey.

Dairy Division:

B. F. VAN VALKENBURGH, New York.

Chief, HENRY E. ALVORD.

LEVI WELLS, Pennsylvania.

Assistant Chief, C. B. LANE.

G. M. WHITAKER, Massachusetts.

## STATE DAIRY OFFICIALS, 1904.

The State laws under which the dairy commissioners' and dairy and food commissioners' offices are created, and those especially relating to dairy matters, were compiled and published by the Dairy Division in 1898 (Dairy No. 21) and in 1900 (Dairy No. 34). Many laws for the protection of dairy products, passed by State legislatures, are inoperative. In some cases courts have failed to sustain the statutes; in others the nonenforcement is due to neglect to provide the necessary special officers and funds. The cost of enforcing the laws referred to varies greatly in the different States. This information can not be exactly obtained, as it is the custom to make but one appropriation for dairy and other food work, and expenditures for the former are not kept separately. In some cases the amounts used in the interest of pure dairy products reach \$10,000 per year, and this amount is far exceeded in two or three States. The salary of the executive officer rarely exceeds \$2,000.

The following is a list of the commissioners and other principal officers:

- CALIFORNIA.** Agent and secretary of the State dairy bureau, J. M. Thomas, San Francisco. Assistant agent, William H. Saylor, 114 California street, San Francisco.
- COLORADO.** State dairy commissioner, Mrs. Mary Wright, Denver. Deputy commissioner, Ella L. Wright.
- CONNECTICUT.** Dairy commissioner, J. B. Noble, Hartford. Deputy commissioner, R. O. Eaton, Montwese.
- IDAHO.** State dairy, pure food and oil commissioner. A. McPherson, Boise City.
- ILLINOIS.** State food commissioner, Alfred H. Jones, Room 1623, Manhattan Building, Chicago. Assistant commissioner, Rudolph M. Patterson.
- INDIANA.** State inspector of food and drugs, J. N. Hurty (State health officer), Indianapolis.
- IOWA.** Dairy commissioner, H. R. Wright, Des Moines. Deputy commissioner, W. E. Smith, Des Moines. Assistant commissioner, P. H. Kieffer, Manchester.
- MASSACHUSETTS.** Executive officer of the dairy bureau, the secretary of the State board of agriculture. General agent State dairy bureau, P. M. Harwood, 136 State House, Boston.
- MICHIGAN.** Dairy and food commissioner, A. W. Smith, Lansing. Deputy commissioner, Perley C. Heald.
- MINNESOTA.** State dairy and food commissioner, W. W. P. McConnell, St. Paul. Assistant commissioner, G. L. Dingman.
- MISSOURI.** Ex-officio dairy commissioner, Geo. B. Ellis (secretary State board of agriculture), Columbia.
- NEBRASKA.** Food commissioner, the governor of the State. Deputy commissioner, W. F. Thompson, Lincoln.
- NEW JERSEY.** Chief inspector of food and drugs, George W. McGuire, Trenton.
- NEW YORK.** Commissioner of the department of agriculture (including dairy), Charles A. Wieting, Albany. Assistant commissioners, G. L. Flanders, Albany; F. J. H. Kracke, No. 23 Park Row, New York City.
- NORTH DAKOTA.** Ex-officio State dairy commissioner, R. J. Turner, Bismarck. State commissioner of agriculture and labor. Assistant dairy and food commissioner, E. E. Kaufman, Fargo.
- OHIO.** Dairy and food commissioner, Horace Ankeney, Columbus. Assistant commissioners, J. J. Kinney, Cincinnati; Geo. Demuth, Toledo.
- OREGON.** Dairy and food commissioner, J. W. Bailey, Portland. Assistant commissioner, H. V. Tartar.
- PENNSYLVANIA.** Dairy and food commissioner of the department of agriculture, Dr. B. H. Warren, Harrisburg. Assistant commissioner, Oliver D. Shock, Harrisburg.
- SOUTH DAKOTA.** Food and dairy commissioner, C. P. Sherwood, Desmet. Assistant commissioner, J. H. Hubbard, Desmet.
- UTAH.** Dairy and food commissioner, Moroni Heiner, Salt Lake City. Assistant commissioner, Herman Harms, Salt Lake City.
- WASHINGTON.** State dairy, food and oil commissioner. E. A. McDonald, Seattle. Assistant commissioner, (Miss) Leah M. Lovetang, Seattle.
- WISCONSIN.** Dairy and food commissioner, J. Q. Emery, Madison. Assistant commissioner, U. S. Baer, Madison.

## DAIRY ASSOCIATIONS, 1904.

The chief work of dairy associations is educational, but they also take an interest in all matters pertaining to the industry, especially legislation and the enforcement of dairy laws.

Most of the organizations named below publish the proceedings of their annual meetings. These are sometimes included with the reports of the State departments of agriculture, but are usually issued separately. It is now difficult to obtain full sets of reports of the older associations, which embrace much dairy information of a valuable and practical character. The same is true of reports of the American Dairymen's Association (1866-1880) and the Northwestern Dairymen's Association (1867-1883), which were disbanded when their fields of operation had become occupied by the younger associations in the several States.

A considerable part of the expenses of holding conventions and publishing reports is met by membership fees which are generally \$1 per year, and special subscriptions of private individuals, firms, and towns where meetings are held; also by receipts from advertisements inserted in the official programmes. But in most States the expenses are largely defrayed by annual grants of the legislatures. From this source the Wisconsin Dairymen's Association receives \$4,000; the Minnesota Dairymen's Association receives \$2,000; the Illinois State Dairymen's Association, \$1,500; the Connecticut Dairymen's Association, about \$1,200; the associations in Vermont, Nebraska, and Ohio, \$1,000 each; the Wisconsin Cheese Makers' Association receives \$600; the Indiana, Maine, New Hampshire, and Wisconsin Butter Makers' associations receive \$500 each; the Michigan Dairymen's Association receives \$300 and the expense of printing the annual reports; the Minnesota State Butter and Cheese Makers' Association receives \$275; the Georgia Association, \$50. In Iowa the expense of printing and distributing the proceedings of the annual meetings of the State Association is borne by the State; in New York and Pennsylvania a part of the expenses of the speakers and the annual meeting are paid by the State; and in Maine some assistance is received through the State commissioner of agriculture.

Prizes, consisting of money and articles useful in the dairy, are frequently offered by the supply trade and others for the best packages of butter and cheese exhibited at the meetings.

Following is a list of all dairy associations whose interests cover any considerable part of a State or larger territory.

**National Association of State Dairy and Food Departments.** Organized 1897. Membership, dairy and food control officials of each State. President, J. W. Bailey, Portland, Oreg. Secretary, R. M. Allen, Lexington, Ky. Annual meetings: St. Paul, Minn., July 21-25, 1903; an international meeting, St. Louis, Mo., September 26, 1904.

**National Creamery Buttermakers' Association.** Organized 1901. Membership, estimated, 3,000. President, H. J. Nietert, Walker, Iowa. Secretary, E. Sudendorf, St. Louis, Mo. Annual meetings: Milwaukee, Wis., October 20-21, 1902; St. Louis, Mo., October 20-27, 1904. (Palace of Agriculture, World's Fair Grounds.)

**National Dairy Union.**<sup>1</sup> Organized 1896. Membership, estimated, 10,000. President, S. B. Shilling, Mason City, Iowa. Secretary, Charles Y. Knight, 154 Lake street, Chicago, Ill. Annual meeting: Waterloo, Iowa, November 19, 1903.

**New England Milk Producers' Association.** Organized 1872. Membership about 4,000. President, H. E. Bullard, Metcalf, Mass. Secretary, W. A. Hunter, 10 Florence street, Worcester, Mass. Annual meetings: Boston, Mass., January 14, 1904; Boston, Mass., January —, 1905.

**Five States Milk Producers' Association.** Organized 1898. Membership about 3,000. President, Ira Snell, Kenwood, N. Y. Secretary, H. T. Coon, Homer, N. Y. Annual meetings, Binghamton, N. Y., October 20, 1903; Binghamton, N. Y., October 19, 1904.

**CALIFORNIA. California Creamery Operators' Association.** Organized 1901. Membership 141. President, Geo. G. Knox, Sacramento, Cal. Secretary, William H. Saylor, 114 California street, San Francisco. General meetings: Sacramento, September 11, 12, 1903; —, probably November, 1904.

**CONNECTICUT. Connecticut Dairymen's Association.**<sup>1</sup> Organized 1882. Membership averages 400. President, E. C. Birge, Westport. Secretary, J. B. Noble, Hartford. Annual meetings: Hartford, January 20-21, 1904; Hartford, third week in January, 1905.

**Connecticut Creamery Association.** Organized 1890. Membership 19. President, E. A. Russell, Suffield. Secretary, E. B. Little, Somers. Annual meeting: Hartford, January 13, 1904.

**GEORGIA. Georgia Dairymen's Association.** Organized 1894. Membership about 100. President, W. L. Williamson, Harmony Grove. Secretary, M. L. Duggan, Sparta. Annual meetings: Athens, August 4, 5, 1903; Tallulah Falls, August 16, 17, 1904.

<sup>1</sup> Incorporated.

- IDAHO. *State Dairy and Pure Food Association*. Organized 1900. Membership 20. President, H. T. French, Moscow. Secretary, A. E. Gipson, Caldwell. Annual meetings: Caldwell, January 27, 28, 1904; probably, Boise, January, 1905.
- ILLINOIS. *Illinois Dairymen's Association*. Organized 1874. Membership 275. President, Joseph Newman, Elgin. Secretary, George Caven, 154 Lake street, Chicago. Annual meetings: Greenville, January 5-7, 1904; ———, January 10-12, 1905.
- Chicago Milk Shippers' Union*.<sup>1</sup> Organized 1896. Membership 3,000. President, D. S. Burgess, Salem, Wis. Secretary, H. B. Farmer, 184 La Salle street, Chicago. General meetings: Chicago, February 29, 1904; Chicago, March 1, 1905.
- INDIANA. *Indiana State Dairy Association*. Organized 1891. Membership 98. President, D. B. Johnson, Mooresville. Secretary, H. E. Van Norman, Lafayette. Annual meetings: Plymouth, December 10, 11, 1903; ———, probably January, 1905.
- IOWA. *Iowa State Dairy Association*. Organized 1876. Membership 380. President, S. B. Shilling, Mason City. Secretary, P. H. Kieffer, Manchester. Annual meeting: Waterloo, November 18-20, 1903.
- KANSAS. *Kansas State Dairy Association*. Organized 1888. Membership 300. President, E. H. Forney, Abilene. Secretary, T. A. Borman, 1109 Thorp street, Topeka. Annual meeting: Topeka, January 26-28, 1904.
- MAINE. *Maine Dairymen's Association*. Organized 1898. Membership 43. President, F. S. Adams, Bowdoinham. Secretary, L. W. Dyer, Woodfords. Annual meeting: Dover, December 1-3, 1903.
- MASSACHUSETTS. *Massachusetts Creamery Association*. Organized 1891. Membership 25. President, Watson N. Wright, Easthampton. Secretary, A. M. Lyman, Montague. Annual meetings: Greenfield, January 27, 28, 1904; ———, December 14, 1904.
- MICHIGAN. *Michigan Dairymen's Association*. Organized 1885. Membership 150. President, Fred M. Warner, Farmington. Secretary, S. J. Wilson, Flint. Annual meetings: Lansing, February 23-25, 1904; Grand Rapids, February, 1905.
- Grand Traverse Dairymen's Association*. Organized 1901. Membership 125. President, Edwin Black, Traverse City. Secretary, D. H. McMullen, Traverse City. Annual meeting: Traverse City, March 16, 17, 1904.
- MINNESOTA. *Minnesota State Dairymen's Association*.<sup>1</sup> Organized 1877. Membership 160. President, A. W. Trow, Glenville. Secretary, J. R. Morley, Owatonna. Annual meetings: Fairmont, December 15-17, 1903; ———, September, 1904.
- Minnesota State Butter and Cheese Makers' Association*.<sup>1</sup> Organized 1894. Membership 250. President, H. J. Credicott, Easton. Secretary, C. I. Cole, Rockford. Annual meeting: Saint James, October 21, 22, 1903.
- MISSOURI. *Missouri State Dairy Association*. Organized, 1890. Membership 150. President, W. W. Marple, St. Joseph. Secretary, C. H. Eckles, Columbia. Annual meeting: Clinton, December 8-11, 1903.
- NEBRASKA. *Nebraska Dairymen's Association*. Organized 1885. Membership 163. President, C. A. Clark, Ravenna. Secretary, S. C. Bassett, Gibbon. Annual meetings: Lincoln, January 20, 21, 1904; Lincoln, January 17, 1905.
- NEW HAMPSHIRE. *Granite State Dairymen's Association*.<sup>1</sup> Organized 1884. Membership 55. President, W. H. Caldwell, Peterboro. Secretary, Ivan C. Weld, Durham. Annual meeting: Keene, December 1-3, 1903.
- NEW YORK. *New York State Dairymen's Association*.<sup>1</sup> Organized 1877. Membership 400. President, Geo. A. Smith, Frankfort. Secretary, Robert McAdam, Rome. Annual meetings: Ogdensburg, December 8-11, 1903. Second week in December, 1904.

---

<sup>1</sup> Incorporated.

- NORTH DAKOTA.** *North Dakota Dairymen's Association.* Organized 1891. President, F. Leutz, Hebron. Secretary, E. E. Kaufman, Fargo. Annual meeting: Fargo, January 20, 21, 1904.
- OHIO.** *Ohio State Dairymen's Association.* Organized 1894. Membership 150. President, Jno. D. Nichols, Cleveland. Secretary, D. A. Crowner, West Jefferson. Annual meeting: Columbus, January 27-29, 1904.
- OREGON.** *Oregon Dairymen's Association.* Organized 1892. Membership 84. President, Wm. Schulmerick, Farmington. Secretary, F. L. Kent, Corvallis. Annual meetings: Corvallis, December 15, 16, 1903; Portland, December, 1904.
- PENNSYLVANIA.** *Pennsylvania Dairy Union.*<sup>1</sup> Organized 1898. Membership 200. President, Dr. H. P. Armsby, State College. Secretary, Dr. M. E. Conard, West Grove. Annual meeting: Lockhaven, December 2, 3, 1903.
- Creamery Association of Eastern Pennsylvania and Vicinity.* Reorganized 1896. Membership 125. President, John I. Carter, Chatham. Secretary, George R. Meloney, 1937 Market street, Philadelphia. Annual meetings: West Chester, January 4, 1904; first Saturday in January, 1905.
- SOUTH CAROLINA.** *South Carolina Dairymen's Association.* Organized 1902. Membership 24. President, ————. Secretary, G. M. Davis, Clinton. Annual meeting: Clemson College, August, 1903.
- SOUTH DAKOTA.** *South Dakota Dairy and Buttermakers' Association.* Organized 1890. Membership 100. President, Leland Griffin, Desmet. Secretary, C. P. Sherwood, Desmet. Annual meeting: Mitchell, February 3, 4, 1904.
- TEXAS.** *State Dairy and Live Stock Association.* Organized 1897. Membership 18. President, J. M. Vance, San Antonio. Secretary, G. E. Adams, Florence. Annual meeting: College Station, July 7-9, 1903.
- UTAH.** *Utah Dairymen's Association.* Organized 1894. Membership 75. President, Lorenzo Hansen, Logan. Secretary, Prof. R. W. Clark, Logan. Annual meeting: Logan, February 17, 18, 1904.
- VERMONT.** *Vermont Dairymen's Association.* Organized 1870. Membership 560. President, H. C. Bruce, Sharon. Secretary, F. L. Davis, North Pomfret. Annual meeting: Burlington, January 5-7, 1904.
- WASHINGTON.** *Washington State Dairymen's Association.* Organized 1894. Membership 250. President, B. F. Reed, Ellensburg. Secretary, Mrs. E. Carmichael, Yakima. Annual meeting: North Yakima, December 29-31, 1903.
- WISCONSIN.** *Wisconsin Dairymen's Association.* Organized 1872. President, Chas. L. Hill, Rosendale. Secretary, George W. Burchard, Fort Atkinson. Annual meeting: Platteville, February 10-12, 1904.
- Wisconsin Cheese Makers' Association.*<sup>1</sup> Organized 1893. Membership 350. President, J. K. Powell, Stevens Point. Secretary, U. S. Baer, Madison. Annual meetings: Milwaukee, January 6-8, 1904; Milwaukee, January —, 1905.
- Wisconsin Buttermakers' Association.*<sup>1</sup> Organized 1901. Membership, 310. President, J. G. Moore, Albion. Secretary, F. B. Fulmer, Ettrick. Annual meeting: Eau Claire, February 2-4, 1904.

---

<sup>1</sup> Incorporated.

## DAIRY INSTRUCTION, 1904.

In the prominent dairy States, and in several others, the State agricultural colleges and some other institutions conduct dairy schools in which they offer short courses in the different branches of dairying. Instruction continues a few weeks, and is given by lectures, laboratory practice, and work in the dairy. It includes the principles of breeding and feeding of dairy cattle, practical exercise in testing milk, and the manufacture and care of dairy products; in some cases, also, the pasteurization of milk and a brief study of dairy bacteriology. There are few entrance requirements.

All of the instruction given in the short courses is offered to the students taking longer dairy courses and the full college courses in agriculture, and these have opportunity to pursue advanced work and to specialize along lines in which they are most interested.

As a rule all the work in the creamery and cheese factory short courses bears directly upon these industries, while in the farm-dairy courses subjects less closely related to dairying are usually taken.

The names of the institutions at which instruction in dairying is given, the kind and amount of the work, as well as the season when offered, together with the names and addresses of instructors in charge, to whom requests for further information may be sent, are stated below:

ALABAMA. *Alabama Polytechnic Institute.*

College course; dairying, sophomore year, fall term, two hours lectures, and three hours practice per week.

Address: Prof. J. F. Duggar, Auburn.

*Agricultural College for Negroes.*

Creamery and dairy farming by special arrangement.

Address: Prof. G. R. Bridgeforth, Normal.

*Tuskegee Normal and Industrial Institute.*

Regular course; farm dairying, two years; two lectures and two practice periods per week.

Address: Prof. Geo. W. Carver, Tuskegee.

CALIFORNIA. *University of California.*

Dairy school; creamery and cheese making, fall, ten weeks.

College course; senior year, first half, dairying, one lecture and eight hours practice per week.

Two-year course; second year, first half, dairying, one lecture and eight hours practice per week.

Address: Prof. E. W. Major, Berkeley.

COLORADO. *State Agricultural College.*

College course; dairying, sophomore year, fall term, five hours lectures and six hours practice per week; senior year, fall term five hours lectures, five hours practice per week; spring term, two hours lectures, six hours practice per week.

Address: W. L. Carlyle, Fort Collins.

CONNECTICUT. *Agricultural College.*

Dairy school; two courses, creamery and farm dairy, winter, each twelve weeks.

College course; dairying, senior year, sixty hours lectures, seventy-two hours practice.

Address: Prof. C. L. Beach, Storrs.

DELAWARE. *Delaware College.*

College course; dairying, senior year, thirty lectures, thirty hours laboratory work.

Short course; farm dairying, ten weeks, two lectures and one laboratory period per week.

Address: Prof. J. A. Foord, Newark.

FLORIDA. *Agricultural College.*

College course; junior year, second term, lectures two hours, practice four hours, per week.

Address: Prof. C. M. Conner, Lake City.

*State Normal and Industrial College.*

Regular course; farm dairying.

Address: President N. B. Young, Tallahassee.

**GEORGIA.** *State College of Agriculture.*

College course; dairying, senior year, two terms.

Short course; dairying and veterinary science, six weeks, ten hours a week.

Address: Prof. J. M. Johnson, Athens.

**IDAHO.** *College of Agriculture, State University.*

Dairy school; creamery and farm dairy, winter, six to eight weeks.

College course; dairying, twenty weeks, three hours practice per week.

Preparatory school; dairying, one year, four hours practice per week.

Short course; farm dairying, winter, three weeks.

Address: Prof. H. T. French, Moscow.

**ILLINOIS.** *College of Agriculture, University of Illinois.*

College course; dairying, three hours a week, one-half year is required; elective one full year. Electives: Farm dairying, creamery and cheese factory management, butter, cheese, commercial milk, pasteurizing, dairy bacteriology, original dairy investigation, etc. (Total electives equal to eighteen hours per week for one year.)

Address: Prof. Wilber J. Fraser, Urbana.

**INDIANA.** *School of Agriculture, Purdue University.*

Dairy school; creamery, farm dairy, winter, ten weeks.

College course; dairying, freshman year, second half, seven hours per week, senior year, elective, six hours per week for one year.

Two-year course; dairying, seven hours per week.

Short courses; (1) starters, cream ripening and butter scoring, ten days;

(2) for adults, farm butter making and milk testing, ten days.

Address: Prof. H. E. Van Norman, Lafayette.

**IOWA.** *State College of Agriculture.*

Dairy school, two courses; butter making, fall, sixteen weeks; cheese making, spring, twenty weeks.

College course; four-year course in dairy husbandry, special dairying subjects in junior year, five hours a week, senior year six hours a week, and electives in junior and senior years may be exclusively on dairying.

Short courses; (1) summer dairy school, twenty weeks; (2) two weeks course for experienced butter makers only, on cream ripening, butter making, starters, milk testing, pasteurizing, and separators; (3) two weeks farmers' course in farm dairying, including butter making, the Babcock test, hand separators, etc.

Address: Prof. G. L. McKay, Ames.

**KANSAS.** *State Agricultural College.*

Dairy school; two courses, creamery, and farm dairy, each twelve weeks, winter.

College course; dairying, sophomore year, twelve weeks, five hours lectures, ten hours laboratory per week.

Address: President E. R. Nichols, Manhattan.

**KENTUCKY.** *State Agricultural and Mechanical College.*

College course; dairying, junior year, winter, ten weeks, one lecture, one hour practice per week.

Short course; dairying, winter, ten weeks, one lecture, one hour practice per week.

Address: Prof. C. W. Mathews, Lexington.

*State Normal and Industrial Institute for Colored Students.*

Regular course; dairying, theory and practice, for one year.

Address: Prof. T. J. Garth, Frankfort.

**LOUISIANA.** *Southern University and Agricultural and Mechanical College.*

Regular course; dairying, senior year.

Address: Prof. Chas. E. Roos, New Orleans.

*State University and Agricultural and Mechanical College.*

College course; dairying, fourth year, first half, two hours lectures, and two hours practice per week.

Short course; dairying, second year, first half, two hours lectures, and two hours practice per week.

Address: President Thos. D. Boyd, Baton Rouge.



**MAINE.** *University of Maine.*

College course; dairying, sophomore year, spring term, six weeks, three hours lectures and ten hours practice per week.

Short course; dairying, two winters, six weeks, two lectures and four hours practice per day.

Address: Prof. G. M. Gowell, Orono.

**MARYLAND.** *State Agricultural College.*

College course; dairying, senior year, second term.

Two-year course; dairying, first term, one hour lecture, four hours practice per week.

Short course; winter, ten weeks, dairying forty hours.

Address: Prof. W. T. L. Taliaferro, College Park.

**MASSACHUSETTS.** *State Agricultural College.*

College course; senior year elective, twenty-eight hours lectures, sixty hours practice.

Short course; dairy farm management, creamery and farm dairy, winter, ten weeks.

Address: Prof. Wm. P. Brooks, Amherst.

**MICHIGAN.** *State Agricultural College.*

Dairy school; four winter courses; creamery six weeks; creamery, twelve weeks; cheese making, four weeks; home dairy, four weeks.

College course; dairying, sophomore year, five weeks, women's course, elective, twelve weeks; senior year, elective, three terms.

Address: Prof. C. D. Smith, Agricultural College.

**MINNESOTA.** *College of Agriculture, University of Minnesota.*

Dairy school; creamery, farm dairy, cheese making, winter, four weeks.

College course; farm dairy, one-half term, two hours per week; students can elect factory course in butter and cheese making, four weeks, four afternoons per week; also practice.

School of Agriculture; second year, first term, seven hours dairying per week; second term, two and one-half hours per week.

Address: Prof. T. L. Haecker, St. Anthony Park.

**MISSISSIPPI.** *State Agricultural College.*

College course; dairying, freshman year, one term, two hours week; sophomore year, one term, five hours week lectures, two hours practice; junior year, one term, nine hours week (one-half lectures, one-half practice); senior year, one term, nine hours week (one-half lectures, one-half practice).

Address: Prof. J. S. Moore, Agricultural College.

*Alcorn Agricultural and Mechanical College.*

Regular course; farm dairying, fourteen weeks.

Address: Prof. J. M. Hicks, Westside.

**MISSOURI.** *College of Agriculture, University of Missouri.*

Dairy school; creamery, cheese making, and farm dairying, winter, eight weeks.

College course; dairying, second year, one term, thirty-six hours lectures, forty-five hours practice; can elect one hundred hours lectures, and one hundred and twenty-six periods laboratory work.

Short course; dairying, twelve hours lectures, eighteen hours practice per week.

Address: Prof. C. H. Eckles, Columbia.

**MONTANA.** *College of Agriculture.*

College course; dairying, senior year, second half, two lectures, two afternoons' practice per week.

Short course; dairying, winter, three months, three lectures, three practice periods per week.

Address: Prof. F. B. Linfield, Bozeman.

NEBRASKA. *School of Agriculture, University of Nebraska.*

Dairy school; creamery and farm dairy, winter, seven weeks.

College course; dairying, first year, two hours lectures, four hours practice, per week.

Long course, School of Agriculture; six months, first year, two lectures and four hours practice per week.

Short course; dairying, winter, seven weeks, two hours per week.

Address: Prof. A. L. Haecker, Lincoln.

NEVADA. *School of Agriculture, State University.*

Dairy school; creamery, farm dairy and cheese making, winter, three months.

College course; dairying, senior year, second half, three hours lectures, four hours practice per week.

Address: Prof. N. E. Wilson, Reno.

NEW HAMPSHIRE. *College of Agriculture and Mechanic Arts.*

Dairy school; creamery, farm dairy, winter, ten weeks.

College course; dairying, junior year, forty-five hours lectures and seventy-five hours practice.

Two-year agricultural course; dairying, one term, two hours lectures and ten hours practice per week.

Address: Prof. Ivan C. Weld, Durham.

NEW MEXICO. *College of Agriculture.*

College course; dairying, senior year, thirty-six hours lectures, forty-eight hours practice.

Short course; dairying, thirty-six hours lectures, forty-eight hours practice.

Address: Prof. J. J. Vernon, Mesilla Park.

NEW YORK. *College of Agriculture, Cornell University.*

Dairy school; creamery, cheese factory, and market milk, winter, eleven weeks.

College course; three hours per week for one year, and elective advanced course.

Short course; farm dairying, winter, eleven weeks, five lectures and two practice periods per week.

Special agricultural course; dairying elective.

Address: Prof. R. A. Pearson, Ithaca.

NORTH CAROLINA. *State College of Agriculture and Mechanic Arts.*

Dairy school; creamery and farm dairy, winter, ten weeks.

College course; dairying, first year, spring term, four hours week; senior, entire year, three hours week.

Two-year agricultural course; dairying, fall term, first year, four hours week.

Winter course in agriculture and dairying, ten weeks.

Address: Prof. C. W. Burkett, West Raleigh.

*Agricultural College for Colored Students.*

College course; dairying, second year, winter and spring terms.

Address: Prof. J. H. Bluford, Greensboro.

NORTH DAKOTA. *State Agricultural College.*

College course; farm dairying, sophomore year, fall term, sixty hours lectures, seventy-two hours practice.

Three-year agricultural course; winter term, sixty lectures, seventy-two hours practice.

Short course; farm dairying, winter, ten weeks, twenty lectures, forty hours practice.

Address: Prof. E. E. Kaufman, Fargo.

OHIO. *State University.*

Dairy school; creamery, cheese factory, farm dairy, two winters, eleven weeks each.

College course; dairying, one year, five hours per week; elective junior and senior year. A second year, two hours per week may be elected; laboratory and seminary through the year; household dairying, spring term, two hours per week; milk inspection, fall term, two hours per week.

Two-years course; dairying, second year, five hours per week.

Address: Prof. John W. Decker, Columbus.

**OKLAHOMA. *State Agricultural and Mechanical College.***

College course; dairying, junior year, winter term, three hours lectures and four hours practice per week.

Two-year course; dairying, second year, fall term, two hours lectures and two hours practice per week.

Short course; dairying, nine lectures, eight afternoons practice.

Address: Prof. F. C. Burtis, Stillwater.

**OREGON. *State Agricultural College.***

Dairy school; creamery and cheese factory, winter, eight weeks.

College course; dairying, sophomore year, one-half term, five lectures per week; junior year, one term, five hours practice per week.

Address: Prof. F. L. Kent, Corvallis.

**PENNSYLVANIA. *School of Agriculture, State College.***

Dairy school; creamery and farm dairy, winter, eight weeks.

College course; dairying, junior year, two hours lectures per week and one hundred hours practice in summer school; dairying, elective in junior year, five hours lectures and ten hours practice per week.

Short course; dairying, winter, twelve weeks, two lectures, and two hours practice per week.

Special one-year course; dairying, elective.

Address: Prof. Geo. C. Watson, State College.

**SOUTH CAROLINA. *Clemson Agricultural College.***

College course; dairying, junior year, first term, four hours lectures, four hours practice per week. (Course soon to be revised.)

Address: Prof. B. H. Rawl, Clemson College.

***Colored Normal, Industrial, Agricultural, and Mechanical College.***

Regular course, junior and senior years, farm and dairy work, five hours per week.

Address: Prof. G. C. Williams, Orangeburg.

**SOUTH DAKOTA. *State Agricultural College.***

Dairy school; creamery, winter, twelve weeks; cheese making, spring, twelve weeks; farm, dairy, fall, twelve weeks.

College course; dairying, freshman and sophomore years, fall term.

Address: Prof. A. H. Wheaton, Brookings.

**TENNESSEE. *University of Tennessee.***

Dairy school; creamery, farm dairy, cheese making, commercial milk, two winters, ten weeks each.

College course; dairying, junior and senior years, four terms.

Address: Prof. A. M. Soule, Knoxville.

**TEXAS. *State Agricultural and Mechanical College.***

College course; dairying, junior year, fall term, three hours lectures, two and one-half hours practice per week.

Short course; creamery, farm dairy, cheese making, winter ten weeks.

Address: Prof. John A. Craig, College Station.

**UTAH. *State Agricultural College.***

College course; freshman year, six months, dairying, three lectures and twelve hours practice per week; senior year, second term, dairying three hours per week.

Three-year course; third year, first term, three hours per week.

Short winter course; four weeks dairying elective.

Address: Prof. R. W. Clark, Logan.

**VERMONT. *State Agricultural College, University of Vermont.***

Dairy school; creamery and farm dairy, winter, four weeks,

College course; dairying, junior year, winter, four weeks, five hours per week (two-thirds lectures, one-third practice).

Address: Prof. J. L. Hills, Burlington.

**VIRGINIA. *State Agricultural College.***

College course; dairying, one term, two hours lectures, four hours practice per week.

Short course; one term, two hours lectures, four hours practice per week.

Address: Prof. D. O. Nourse, Blacksburg.

***Hampton Normal and Agricultural Institute.***

Regular course; dairying, boys, twelve periods lectures; girls, ten periods lectures; both, ten periods practice.

Special agricultural course; twenty lectures, twelve weeks practice, three to five hours daily.

Address: Prof. W. S. Sweetser, Hampton.

**WASHINGTON. *State Agricultural College.***

Dairy school; creamery and cheese factory, winter, eight weeks.

College course; dairying, two-fifths course (two-fifths of nineteen weeks), lectures three-fifths, practice two-fifths.

Address: Prof. E. E. Elliott, Pullman.

**WEST VIRGINIA. *West Virginia Colored Institute.***

Regular course; junior year, dairying, three months, lectures and practice.

Address: Prof. A. W. Curtis, Institute.

**WISCONSIN. *College of Agriculture, University of Wisconsin.***

Dairy school; creamery, cheese factory, farm dairy, winter twelve weeks, summer three months; advanced work for second-year students.

College course; dairying elective.

Address: Prof. E. H. Farrington, Madison.

**ASSOCIATION OF BREEDERS OF PUREBRED DAIRY CATTLE, 1903.**

The interests of the different breeds of dairy cattle are in charge of organizations of breeders which determine purity of breeding, verify pedigrees, register eligible animals, and publish herd books. Some of them record and publish sales and transfers and attested records of dairy performances. They also establish standards of excellence. The details of the work are usually left to the secretary. The names of the various associations and the addresses of the secretaries are as follows:

***Ayrshire Breeders' Association.***

Secretary, C. M. Winslow, Brandon, Vt.

***Brown Swiss Breeder's Association.***

Secretary, N. S. Fish, Groton, Conn.

***American Devon Cattle Club.***

Secretary, L. P. Sisson, Newark, Ohio.

***Dutch Belted Cattle Association of America.***

Secretary, H. B. Richards, Easton, Pa.

***American Guernsey Cattle Club.***

Secretary, Wm. H. Caldwell, Peterboro, N. H.

***Holstein-Friesian Association of America.***

Secretary, F. L. Houghton, Brattleboro, Vt.

***American Jersey Cattle Club.***

Secretary, J. J. Hemingway, 8 W. Seventeenth street, New York. N. Y.

***American Polled Durham Breeders' Association.***

Secretary, F. S. Hines, Malott Park, Ind.

***The American Polled Jersey Cattle Club.***

Secretary, Charles S. Hatfield, Springfield, Ohio.

***Red Polled Cattle Club of America.***

Secretary, J. McLain Smith, Dayton, Ohio.

***American Short Horn Breeders' Association.***

Secretary, John W. Groves, Union Stock Yards, Chicago, Ill.

***American Milch Goat Association.***

Secretary, W. A. Shafor, Hamilton, Ohio.

**INTERNATIONAL DAIRY FEDERATION.**

(La Fédération Internationale Laitière.)

[For the organization of the International Dairy Congress and Exposition to be held at Paris during the year 1905.]

**PRESIDENT.**—The Baron Peers of Nieuwburg.

President of the National Dairy Society of Belgium.

**SECRETARY-GENERAL.**—M. Armand Collard-Bovy, Brussels.

Secretary, National Dairy Society of Belgium.

**ASSISTANT SECRETARY.**—Prof. J. Troude, Paris.

National School of Agricultural Industries at Douai, France.

**ARGENTINA.**—M. Montero-Rios, Consul-General of Argentina.

**AUSTRIA.**—Maximilian Ripper, Agr. Chemical Exp. Sta., Vienna.

**BELGIUM.**—Paul De Vuyst, Inspector of Agriculture, Brussels.

**DENMARK.**—Prof. Bernard Bøggild, Royal Agricultural Institute, Copenhagen.

**FRANCE.**—Dr. H. Ricard, Senator, Côté d'Or.

**GERMANY.**—Benno Martiny, Berlin.

**GREAT BRITAIN AND IRELAND.**—W. P. Coyne, Dept. of Agric. for Ireland, Dublin.

**HOLLAND.**—Dr. Wysemann, Leyden.

**HUNGARY.**—Chief Chemist Jules Toth, Central Station, Budapest.

**ITALY.**—M. Besana, Director of Dairy Station, Lodi.

**LUXEMBOURG.**—Director Aschmann, Agricultural Station, Ettelbruck.

**RUSSIA.**—Dr. Kalantaz.

**SPAIN.**—Garcia de los Salmones, Director of the Agric. Service, Pampelune.

**SWEDEN.**—Chr. Barthel, Hamra.

**SWITZERLAND.**—Dr. N. Gerber, Zurich.

**UNITED STATES.**—Maj. Henry E. Alvord, Washington.

Permanent Headquarters of the Federation, 56 Marie-Louise Square, Brussels.

Branch office, for the Congress of 1905, 61 Boulevard Barbés, (18e) Paris.

**PROVISIONAL COMMITTEE ON ORGANIZATION FOR THE UNITED STATES.**

**Maj. Henry E. Alvord**, Chief of Dairy Division, U. S. Department of Agriculture, Chairman, ex-officio.

**Dr. S. M. Babcock**, Chemist, Agricultural Experiment Station, Madison, Wisconsin.

**Hon. J. W. Bailey**, State Dairy and Food Commissioner, Portland, Oregon.

**Secretary T. A. Borman**, Kansas State Dairy Association, Topeka, Kansas.

**President Wm. H. Caldwell**, Granite State Dairymen's Association, Peterboro, New Hampshire.

**Secretary C. H. Eckles**, Missouri Dairymen's Association, Columbia, Missouri.

**Prof. T. L. Haecker**, Department Dairy Husbandry, State University, St. Anthony Park, Minnesota.

**Hon. W. D. Hoard**, Hoard's Dairyman, Fort Atkinson, Wisconsin.

**Hon. J. B. Noble**, State Dairy Commissioner, Hartford, Connecticut.

**Prof. R. A. Pearson**, Department Dairy Husbandry, Cornell University, Ithaca, New York.

**Secretary Wm. H. Saylor**, California Creamery Operators' Association, San Francisco, California.

**President Geo. A. Smith**, New York State Dairymen's Association, Geneva, New York.

**President Fred M. Warner**, Michigan Dairymen's Association, Farmington, Michigan.

**President W. L. Williamson**, Georgia Dairymen's Association, Harmony Grove, Georgia.

**Hon. H. R. Wright**, State Dairy Commissioner, Des Moines, Iowa.